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February 15, 2008

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Re: Supplemental Comments - Proposed Merged-Stack Stationary Source Permit to Operate Dated December 21, 2007, Mirant Potomac River Generating Station, Alexandria, Virginia

Honorable Board Members, Director Paylor and Mr. Darton:

The City of Alexandria ("Alexandria") appreciates the opportunity to provide comments on the above-referenced merged-stack State Operating Permit ("SOP") for Mirant's Potomac River Generating Station ("PRGS") located in Alexandria, Virginia. As proposed by Virginia Department of Environmental Quality ("VDEQ"), the SOP allows PRGS to merge its five existing stacks into two stacks in order to achieve greater dispersion of the facility's emissions into the atmosphere, i.e., it allows construction and operation of the facility under a "merged-stack" or "two-stack" configuration. The proposed SOP also allows PRGS to use an alternate sorbent, instead of trona, for reducing SO_2 emissions. Alexandria previously submitted comments on January 29,

2008 outlining several crucial deficiencies in the two-stack SOP as proposed. At the public hearing on January 25, 2008, the State Air Pollution Control Board ("SAPCB") requested Mirant to provide additional data to support the proposed SOP. Specifically, the SAPCB requested that Mirant provide the results of its recent testing of the alternate sorbent, i.e., sodium bicarbonate ("SBC") and extended the public comment period to allow public review of the test report. Herein, Alexandria provides supplemental comments on the two-stack SOP, including comments on the SBC test report.

The letter also provides additional comments in response to VDEQ's memorandum of January 23, 2008 addressing Alexandria's earlier requests to evaluate PRGS's $PM_{2.5}$ impacts as a part of this permitting process.

Alexandria would also like to bring to the attention of the SAPCB and the VDEQ recent actions taken by Mirant in preparation of major upgrades of its boilers, the scope of which far exceeds the stack merger allowed by the proposed two-stack SOP. These upgrades have a potential to improve reliability, reduce forced outages and increase plant availability, thereby creating a potential to increase emissions. To Alexandria's knowledge, these upgrades are not authorized by any current or proposed permit.

Summary of Alexandria's Supplemental Comments

1. The SBC testing conducted by Mirant is inadequate for a full assessment of the effect of this sorbent. All boilers must be tested. Pre- and post-ESP emissions must be quantified. Tests must be conducted both with and without SBC injection. SBC injection rate must be optimized to reflect the capability of SBC to maximum SO_2 reduction.

2. A comparison of the PM_{10} and $PM_{2.5}$ emissions rates during SBC injection with the no-sorbent (trona off) test results of December 2006 shows that SBC significantly increases particulate matter emissions. Also, the $PM_{2.5}$ fraction of the PM_{10} emissions from the SBC test is greater than the corresponding fraction from December 2006 tests, which indicates that SBC contributes to a greater increase in $PM_{2.5}$ emissions. These increases are sufficient to trigger major NSR. They also further justify the need for baghouses to control particulate matter emissions.

3. Alexandria remains concerned with the unresolved issue of exposure to peak 5-minute SO_2 concentrations due to PRGS's emissions. Despite several requests by Alexandria, Mirant has not shared its 5-minute monitoring data. Mirant should be required to provide these data for public review. Reduction of peak 5-minute concentrations is another reason why the sorbent injection should be optimized to provide maximum SO_2 reductions.

4. The short term SO_2 emissions allowed under the proposed two-stack SOP are greater than those allowed under the proposed five-stack SOP as well as PRGS's current SOP dated June 1, 2007. This is because VDEQ has granted dispersion

credit for stack merger. However, a dispersion credit for SO_2 is unlawful because Mirant has not proposed any pollution controls as a part its stack merger project.

5. VDEQ argues that the $PM_{2.5}$ modeling policies of other states, i.e., Connecticut, New Jersey and New York, are designed to only address new or modified sources that increase emissions and that PRGS is not proposing any emissions increase. However, these policies address cumulative $PM_{2.5}$ impacts from all sources, both new and existing, to assess NAAQS compliance. Also, evidence shows that the installation of trona injection caused, and any future use of SBC injection will likely cause, increases in particulate matter emissions. The modeling methodology adopted by these states is not only applicable, it can be readily applied for assessing PRGS's impacts due to primary $PM_{2.5}$ emissions, including filterable and condensable emissions, as being done by these states.

6. Mirant's recent actions in January 2008 indicate that it is planning major repairs and upgrades of its boilers. The planned work includes replacing superheaters, tubes, valves and waterwalls, and other repairs to turbines, boilers and auxiliary components. It appears that Mirant may be scheduling this work in Fall 2008 around the same time that it anticipates outages for constructing the stack mergers. The scope of these repairs and upgrades far exceeds the work required to re-route post-ESP ducts for stack merger, and Mirant's planning of this project represents yet another example of its sheer disregard for SAPCB and VDEQ authority. These are significant physical modifications that must be assessed for NSR applicability.

The following sections provide more detailed discussions of the above comments.

I. The SBC Testing is Inadequate for a Complete Assessment

Alexandria reviewed Mirant's SBC test report, and the corresponding appendices, provided by VDEQ. It is evident from the report that the test was specifically designed to only evaluate stack emissions of particulate matter and acid gas emissions while SBC is being injected. Even though the test report claims that the "facility was evaluating the effectiveness of sodium bicarbonate injection for control of SO2 emissions," no data and discussion are presented to support how SBC's effectiveness was evaluated for controlling any pollutant, let alone SO_2.

SBC Use Must be Optimized for SO_2 Control

The SBC injection during the testing was not designed to optimize its use to maximize SO_2 reduction. Unlike testing of trona in December 2006, where trona use was required to achieve maximum SO_2 reduction based on Mirant's previous effectiveness evaluations, SBC use was limited to achieve a pre-determined emission rate of about 0.30 lb/MMBtu that complies with the limits of the proposed SOP. Therefore, no assessment can be made as to the level of SO_2 control that can be achieved with SBC injection. Alexandria's research of SBC shows that it is capable of reducing SO_2 emissions down to 0.10 lb/MMBtu or less, i.e., greater reduction than trona. Prior to conducting the stack

tests, Mirant must assess the capability of SBC to maximize SO_2 reductions using CEM data and then conduct the stack tests at the corresponding SBC injection rates.

All Boilers Must be Tested

The SBC test was only conducted on one unit, i.e., Boiler 4, even though the test protocol indicates that all boilers were planned to be tested. Without testing of all five boilers, a true assessment of the facility's emissions cannot be made.

A Complete Set of Tests Must be Performed

Unlike the trona testing of December 2006, where particulate emissions were measured at three locations, namely, pre-hot ESP, pre-cold ESP and in-stack, Mirant only tested the stack emissions during SBC injection. Similarly, unlike the December 2006 testing of "trona on" and "trona off" scenarios, Mirant only tested the "SBC on" scenario. No testing was performed for "SBC off" scenario. For a meaningful assessment of the effect of SBC on the ESP control efficiency, the particulate matter (PM_{10} and $PM_{2.5}$) emissions, and SO_2, HCl and HF emissions, Mirant must perform a complete set of pre- and post-ESP tests, both with and without SBC injection.

Additional Data Must be Provided

The SBC test report did not provide certain crucial data for a complete assessment, such as coal firing rate (tons/hour) and SBC physical and chemical properties, including SBC particle size distribution as injected. While there was no discussion of SBC milling in the test report, based on a discussion with VDEQ, Alexandria believes that SBC was milled prior to injection. Alexandria's research shows that SBC typically used for SO_2 control contains as much as 50% particles less than 12 microns in size, i.e., a much greater fraction than in the trona used at PRGS. Therefore, use of this sorbent has an even greater potential to increase PM_{10} and $PM_{2.5}$ emissions. Mirant must determine the particle size distribution of SBC as injected and present the data for public review.

II. SBC Test Results Indicate Increase in PM and Acid Gas Emissions

In the absence of complete testing of SBC discussed above, Alexandria performed a comparison of the SBC test results on Boiler 4 with the trona test results on Boiler 3 from December 2006.

SBC Increases PM_{10} and $PM_{2.5}$ Emissions

The following table presents a comparison of the PM_{10} and $PM_{2.5}$ emissions at high boiler loads measured during the trona testing of December 2006 and the SBC testing of November 2007.

TABLE 1
Comparison of PM Emissions from Dec 2006 and Nov 2007 Stack Tests

Pollutant/ Parameter	No Sorbent Boiler 3 Dec 2006	Trona On Boiler 3 Dec 2006	SBC On Boiler 4 Nov 2007	SBC On vs. No Sorbent	SBC On vs. Trona On
	Measured Emissions (lb/MMBtu)			% Increase in Emissions	
PM_{10}	0.0163(1)	0.0136	0.0188	15.3%	38.2%
$PM_{2.5}$	0.0145(1)	0.0116	0.0173	19.3%	49.1%
	Calculated $PM_{2.5}$ Fraction (wt %)			Increase in $PM_{2.5}$ Fraction	
$PM_{2.5}$-to-PM_{10} Ratio	89%	85%	92%	3%	7%

(1) The test results for Trona Off scenario are suspect because the cold ESP registered very low control efficiency, i.e., in the range of about 50% to 70%, during the test runs compared to an expected efficiency of greater than 90%. At 90% efficiency of the cold ESP, these emissions would be lower.

The above table shows that the use of SBC has a potential to increase PM_{10} and $PM_{2.5}$ emissions. For example, when comparing the current operations with trona use and future operations with SBC use, an increase in particulate matter emissions of 38% to 49% is possible.

The SBC test was also conducted at low boiler loads and showed PM_{10} and $PM_{2.5}$ emission rates of 0.0281 and 0.0276 lb/MMBtu, respectively. These rates are greater than the corresponding emissions at high load and represent an even greater increase in particulate matter emissions. No explanation is provided in the report regarding why, on a per MMBtu basis, the emissions are significantly different between high and low loads.

SBC Increases Acid Gas Emissions

The following is a comparison of the acid gas emissions, i.e., hydrogen chloride ("HCl") and hydrogen fluoride ("HF"), between the SBC test of November 2007 and the trona test of December 2006. As with the particulate matter emissions discussed above, the acid gas emissions also appear to increase due to SBC use.

TABLE 2
Comparison of Acid Gas Emissions from Dec 2006 and Nov 2007 Stack Tests

Pollutant	Trona On Boiler 3 Dec 2006	SBC On Boiler 4 Nov 2007	SBC vs. Trona
	Measured Emissions (lb/MMBtu)		% Increase in Emissions
HCl	1.12e-03	9.95e-03	888.4%
HF	7.76e-04	9.81e-04	26.4%

There is a significant difference in the HCl and HF emissions between low load versus high load. The high load emissions are a factor of 5 to 10 times greater than low load emissions. No explanation is provided in the report regarding why, on a per MMBtu basis, the emissions are significantly different between high and low loads.

PM Emission Increases are Sufficient to Trigger Major NSR

The table below presents a calculation of the increase in annual PM_{10} and $PM_{2.5}$ emissions (tons/year) that would be associated with the above increases in lb/MMBtu emissions due to SBC use. These emission increases are sufficient to trigger review under major NSR regulations and require the application of LAER for $PM_{2.5}$.

TABLE 3
PM Emissions Increases Due to SBC Injection

Pollutant	Baseline Emissions[(1)] (tons/yr)	% Increase Due to SBC[(2)]	Increase in Emissions[(2)] (tons/yr)	Major NSR Threshold (tons/yr)
PM_{10}	137	38%	52	15
$PM_{2.5}$	117	49%	57	15[(3)]

(1) Based on 24 months of available data from Oct 2005 through Sept 2007, using the average annual heat input during this period of 14,675,115 MMBtu/yr, the highest PM-10 stack test result of 0.0186 lb/MMBtu (Dec 2005) and the highest $PM_{2.5}$-to-PM_{10} ratio of 0.86 (Dec 2006). Trona was in use during the baseline period.
(2) Assuming these emission increase percentages apply to all five boilers.
(3) Assuming that NSR applicability threshold for $PM_{2.5}$ is the same as for PM_{10}.

SBC is Not a PM Control Method

The above analysis indicates that SBC has a potential to increase PM_{10} and $PM_{2.5}$ emissions. This clearly demonstrates that SBC is not a control method for reducing particulate matter emissions. In its memorandum dated December 21, 2007, supporting the two-stack SOP, VDEQ recommended deferring the decision on granting dispersion credit for PM_{10} and $PM_{2.5}$ until additional stack test data are available. Based on these stack test data, no dispersion credit can be granted.

Alexandria has previously provided evidence that trona is not a PM control method. This is true for SBC as well. Alexandria's analysis shows that sorbent injection achieves SO_2 control at the expense of particulate matter emissions at PRGS. Therefore, regardless of whether trona or SBC is used at PRGS, any dispersion credit for PM_{10} and $PM_{2.5}$ due to stack merger would be unlawful.

Analysis of Sorbent Injection Rates

The following is a comparison of the sorbent injection rates during the trona test of December 2006 and the SBC test of November 2007. The table shows that the SBC testing was performed at an injection rate of less than half that used for trona, while still achieving similar SO_2 reduction, i.e., an emission rate of approximately 0.30 lb/MMBtu.

TABLE 4
Comparison of Sorbent Injection Rates from Dec 2006 and Nov 2007 Stack Tests

Pollutant Being Tested (High Load)	Trona On Boiler 3 Dec 2006	SBC On Boiler 4 Nov 2007	SBC as a % of Trona
	Average Injection Rate (lb/hour)		%
PM_{10} / $PM_{2.5}$	8,042	3,690	45.9%
HCl / HF	8,221	3,502	42.6%

This shows that SBC is more efficient at controlling SO_2 emissions than trona and, if its use is optimized, greater SO_2 reductions can be achieved. Mirant should be required to identify the capability of SBC to reduce emissions and appropriate short term and annual SO_2 limits should be establish in the SOP to reflect such optimization.

On the other hand, it is worth noting that even at lower injection rates, SBC use has a potential to increase particulate matter emissions as compared to trona use. Any greater use of SBC is likely to produce greater particulate matter emissions, thereby creating an even greater need to install baghouses at PRGS.

Use of an Alternate Sorbent Must Not be Pre-Authorized

The above analysis shows that SBC has a potential to increase emissions from PRGS. Its use should be pre-authorized in the SOP without adequate review by SAPCB and VDEQ. It represents a change in the method of operation for which NSR applicability must be assessed. Mirant should be required to provide additional data and apply for a permit before using the alternate sorbent.

III. Baghouses are Required to Adequately Control Emissions

The overwhelming evidence of PRGS's high impacts and the preponderance of data linking $PM_{2.5}$ to serious health effects, up to and including premature deaths, require the SAPCB and VDEQ to take a proactive stance towards minimizing emissions from this facility and mitigating the adverse impacts. Beyond the available regulatory framework, the SAPCB also has the general duty to protect public health and is authorized to use discretion in the interest of protecting public health and the environment. In a permitting action such as the issuance of this SOP, Virginia law at Title 10.2, § 1307.E, authorizes the SAPCB to consider the threat caused by any activity due to the "*character and degree of injury to, or interference with, safety, health, or the reasonable use of property*" and the "*scientific and economic practicality of reducing or eliminating the discharge resulting from such activity*" and balance it with the "*social and economic value of the activity.*" Alexandria urges the SAPCB to use its discretionary authority to critically evaluate these health effects and mandate the reduction of particulate matter emissions from PRGS. The harm caused by PRGS is significant, and exacerbated by the intense residential development around the plant, while the value of the plant's service is diminished from that period when Washington D.C. relied on its output to meet energy reliability needs. Given that it is feasible and practical to control and monitor $PM_{2.5}$

emissions from the PRGS, Alexandria requests that the SAPCB should exercise a broad scope of review in this permitting action.

Analysis conducted by Alexandria to date shows that baghouses are necessary on all five boilers in order to mitigate the adverse health-related impacts from PRGS. This is the only way for PRGS to reduce its particulate matter emissions sufficiently to comply with NAAQS and alleviate the health impacts. Alexandria believes that baghouses would have likely been required if PRGS had properly applied the major NSR regulations and secured a construction permit prior to the installation of the trona injection system. Based on the above analysis of potential emission increases due to SBC uses, Alexandria also believes that baghouse would be required if SBC is selected as the alternate sorbent allowed under the proposed SOP. Alexandria requests the SAPCB to earnestly consider the benefits of baghouse installation at PRGS. Not only will baghouses reduce particulate matter emissions, they will enhance the performance of trona in reducing SO_2 and acid gas emissions, and will also aid in the reduction of mercury emissions. Baghouses will also help shave the peak 5-minute SO_2 concentrations at nearby receptors, which is a concern that led the Agency for Toxic Substances and Disease Registry ("ATSDR") to conduct an ambient monitoring study in the area surrounding the PRGS.[1]

The benefits of this multi-pollutant control far exceed the cost of the baghouses. Alexandria believes that the capital expenditure to be incurred for stack merger would be better spent on baghouses because it will serve to reduce emissions of several pollutants. Baghouses will not only reduce emissions of PM_{10} and $PM_{2.5}$, they will improve the performance of sorbent injection to enhance control of SO_2, HCl and HF, and will also help reduce mercury emissions. Such multi-pollutant control serves the primary goal of the Clean Air Act, i.e., emissions reductions.

In a revised technical report dated February 15, 2008, submitted under separate cover, Alexandria has also provided comments prepared by EarthTech discussing a cost benefit analysis for PRGS. This study further validates the benefits to be achieved by installing baghouses.

IV. Proposed SOP Allows SO_2 Emissions Increases

VDEQ has recommended that Mirant should be allowed dispersion credit for SO_2 emissions because of stack merger. However, this is unlawful given that Mirant has not proposed any emissions control as a part of its stack merger project. Any emissions controls currently in use were installed previously to meet other regulatory requirements, e.g., NAAQS compliance. Furthermore, even with SBC use, Mirant has not demonstrated that it can achieve a lower emission rate than trona. Even if SBC is tied to the stack merger project, it is only upon a satisfactory demonstration that SBC can achieve greater SO_2 control than trona, and establishment of an enforceable emissions limit reflecting the lower emissions, can VDEQ allow this dispersion credit. The

[1] Alexandria remains concerned with the adverse health effects of peak short term (5-minute) SO_2 concentrations. Mirant should be required to share the 5-minute average data from its monitoring network.

following table shows a comparison of the short term SO_2 emissions in the proposed two-stack SOP, the proposed five-stack SOP, and the current SOP.

TABLE 5
Comparison of Short Term SO_2 Emissions

Pollutant, Averaging Period	Current SOP Jun 2007 (lb/hour)	Proposed 5-Stack SOP Oct 2007 (lb/hour)	Proposed 2-Stack SOP Dec 2007 (lb/hour)
SO_2, 3-hour	1,306	1,041	2,078
SO_2, 24-hour	871	999	1,865

The proposed two-stack SOP must be revised to reflect no dispersion credit for any pollutant, including SO_2, due to stack merger.

V. $PM_{2.5}$ Impacts Must be Assessed

Alexandria has previously provided comments requesting SAPCB and VDEQ to consider $PM_{2.5}$ modeling policies adopted by other states, i.e., Connecticut, New Jersey and New York, to evaluate impacts due to PRGS's emissions. In its response dated January 23, 2008, VDEQ argues that the $PM_{2.5}$ modeling policies of these other states are designed to only address new or modified sources that increase emissions. However, these policies address cumulative $PM_{2.5}$ impacts from all sources, both new and existing, to assess compliance with the $PM_{2.5}$ NAAQS. Moreover, if $PM_{2.5}$ emissions can be modeled from a new or modified source, they can be modeled from an existing source. The methodology adopted by these states involves modeling of primary $PM_{2.5}$ emissions, including filterable and condensable $PM_{2.5}$, and can be readily applied for assessing PRGS's impacts.

The purposes of both the five-stack and two-stack SOPs are identical, i.e., development of a comprehensive SOP that stipulates limitations for this facility that will meet the Virginia statutory requirement of NAAQS compliance. The proposed SOP contains permit limitations for many pollutants, including HCl and HF, which were not explicitly named in Mirant's 2004 Order by Consent, yet the PRGS's permit limitations for those pollutants have been designed to comply with NAAQS and Significant Ambient Air Concentration guidelines. While compliance with $PM_{2.5}$ may be the most constraining for this plant's operation and existing control technology selection, this simply does not obviate the statutory requirement that limitations issued within a permit meet NAAQS compliance.

VDEQ also argues that PRGS has not proposed an increase in emissions and therefore the modeling policies of Connecticut, New Jersey and New York are not applicable. Apparently, VDEQ ignores the fact that the issue of NSR applicability to installation of trona injection remains unresolved. Had VDEQ properly analyzed the particulate matter emissions increases due to trona injection, NSR would have been triggered and modeling policies would be directly applicable to PRGS. VDEQ must publicly disclose its findings of the NSR applicability analysis. Given the above discussions on potential emissions

increases due to SBC use, VDEQ must also consider NSR applicability if SBC is selected as the alternate sorbent.

VI. Mirant's Planned Capital Improvement Project

Mirant's has recently taken actions[2] indicating that it is planning major repairs and upgrades of its boilers. See Attachment I. The planned work includes repairs and upgrades to all five of its boilers and may be scheduled to coincide with the planned outages in Fall 2008 for constructing the stack mergers. Work includes replacing superheaters, tubes, valves and waterwalls, and other repairs to turbines, boilers and auxiliary components. To Alexandria's knowledge, this work has not been authorized by SAPCB or VDEQ. The scope of these repairs and upgrades far exceeds the work required to re-route post-ESP ducts for stack merger. These are significant physical modifications that have a potential to increase emissions by improving reliability, reducing forced outages, and increasing plant availability. The following is a summary of planned work on Boilers 1 and 2.

TABLE 6
Planned Upgrades to Boilers 1 and 2

Affected Unit	Activity Description	Cost	Outage Period
Unit 1 Upgrade	Replace Superheater, Waterwalls, Tubes	$3,000,000 for detailed design phase.	2-3 months[a]
Unit 1 "MRO"	Boiler (boiler, pendants, refractory, economizer, condenser, fans, refractory), Turb/Gen (rotors, discs, buckets, stators, nozzles, pumps, shafts.	Not delineated.	Assumed included in above outage period.
Unit 2 Upgrade	Replace Superheater, Waterwalls, Tubes	$3,000,000 for detailed design phase.	2-3 months[b]
Unit 2 "MRO"	Boiler (boiler, pendants, refractory, economizer, condenser, fans, refractory), Turb/Gen (rotors, bearings, discs, buckets, stators, nozzles, pumps, shafts, motors).	Not delineated.	Assumed included in above outage period.

Notes:
a. Project proposed start and completion dates are October and December, 2008.
b. Proposed start and completion dates are November, 2008 to January, 2009.

These upgrades qualify as physical modifications which under federal and Virginia NSR regulations should be evaluated for their potential effect on annual emissions. Currently, there is no positive demonstration that these two boiler upgrades qualify for the routine maintenance and repair exemption under NSR regulations. In 2005, the federal government found that Ohio Edison Company violated the Clean Air Act by proceeding with replacement of boiler parts at a pulverized coal boiler facility, labeled 'activities,' without evaluating these activities' effects on annual emissions; the subject 'activities,' bear resemblance to the activities proposed here. In determining that these activities did

[2] "Capital PEC Report," 2007.

not qualify for the routine maintenance exemption under the Clean Air Act, the plaintiffs relied on four main criteria to evaluate them.[3]

1) **nature, scale and extent of activities.** These elements were assessed by determining if outside contractors or internal maintenance staff performed the work, if the project required unit shutdown on the order of weeks or months at a time, and whether the cost of the work be capitalized for accounting purposes and recorded under federal energy regulatory requirements.
2) **purpose of activities. I**f the purpose of the project is to increase availability and reliability of boiler units, then the potential for increased annual emissions should be evaluated.
3) **frequency of activities.** This assessment required a determination of how frequently the particular activity would be performed, for example, were the activities of a type that would only be performed once or twice during a unit's expected life cycle.
4) **Cost of activities.** In the case of the Ohio Edison Company decision, physical modifications or activities that were found to fall outside of the definition of routine maintenance activities, were found to increase annual emissions at the facility, and which bear some resemblance to the proposed boiler upgrades at PRGS were performed within projects that cost (including actual construction costs) between $1.1 million and $27 million.

Importantly, the Ohio Edison decision notes that while Clean Air Act regulations create an exemption from NSR review of "an increase in the hours of operation or in the production rate," such an exemption "applies when there is an increase of hours of operation unaccompanied by physical construction to the unit itself."[4] It is possible that the replacement of some of these elements will lead to increased availability of the PRGS by reducing forced outages and increasing plant availability.

In the case of Ohio Edison, superheater, waterwall parts and tubes contributed (in part) to forced outages totaling between 109 and 793 hours among that facility's coal-fired units. Any reduction in similar forced outages at PRGS would cause significant emissions increases that must be analyzed for NSR applicability.

Currently, both the five-stack SOP and the two-stack SOP set annual limits for PM_{10} and $PM_{2.5}$ that are far greater than the plant achieve. A large compliance margin will serve to accommodate emissions increases from any future physical and operational changes, such as those described above, without adequate review. It is therefore critical that the proposed SOP reflect emission limits that closely resemble the facility's actual emissions.

[3] "Opinion and Order," United States of America, et.al. v. Ohio Edison Company, et.al., Case No. 2:99-CV-1181.
[4] Ibid., "Opinion and Order."

Once again, Alexandria appreciates the opportunity to provide these comments to the SAPCB and VDEQ on this important matter. Should you have any questions, please do not hesitate to contact William Skrabak at (703) 519-3400, ext. 163.

Sincerely,

William J. Skrabak

William Skrabak
Chief, Division of Environmental Quality
Department of Transportation & Environmental Services
City of Alexandria

Reviewed and approved for technical content by,

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cc: The Honorable James P. Moran
The Honorable Tim Kaine
The Honorable L. Preston Bryant, Jr.
The Honorable Richard L. Saslaw, Senate of Virginia
The Honorable Patricia S. Ticer, Senate of Virginia
The Honorable Mary Margaret Whipple, Senate of Virginia
The Honorable Bob Brink, Virginia House of Delegates
The Honorable Adam P. Ebbin, Virginia House of Delegates
The Honorable David L. Englin, Virginia House of Delegates
The Honorable Al Eisenberg, Virginia House of Delegates
The Honorable Brian J. Moran, Virginia House of Delegates
The Honorable Mayor and Members of City Council, City of Alexandria
James K. Hartmann, City Manager, City of Alexandria
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Ignacio B. Pessoa, City Attorney, City of Alexandria
John B. Britton, SHSL
Richard Weeks, VDEQ
Mike Kiss, VDEQ

Attachment I

Mirant's Planned Repairs and Upgrades

at the

Potomac River Generating Station
Alexandria, Virginia

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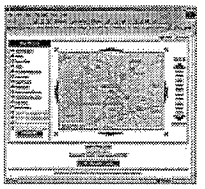
Industry News Alert

Mirant Plans 2008 Outages at Potomac River Power Station

SUGAR LAND--January 29, 2008--Researched by Industrial Info Resources (Sugar Land, Texas)--Mirant Potomac River LLC (Alexandria, Virginia), a subsidiary of Mirant Corporation (NYSE:MIR) (Atlanta, Georgia), is already planning the 2008 outage schedule at the 460-megawatt Potomac River Power Station (Alexandria, Virginia).



Situated across the Potomac River from the White House, the coal/oil-fired facility is vital to the Washington D.C.'s electricity grid. It became operational in 1949 and consists of five units ranging from 80 MW to 100 MW.

Kicking off this spring, four- to five-week outages are scheduled on three of the units consecutively. The outages will consist of inspection and repairs to the General Electric turbine/generators and Alstom/Combustion Engineering boilers.

Major upgrades will be performed on the two remaining smaller units later in the fall. The project scope will include replacing the superheaters, tubes, valves, and waterwalls plus repairs to auxiliary components.

The units have already been equipped with low NOx burners (LNBs) and SOFA (Separated Overfired-Air) systems to reduce emissions.

Mirant Corporation also owns and operates the 2,600-MW Chalk Point Power Station (Aquasco, Maryland), and the 1,492-MW Morgantown Power Station (Newburg, Maryland) in the DC area.

View Plant Profile - 1014483
View Project Report - 27002019 27002020

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Plant Contacts Mailing Lists

Project: ALEXANDRIA COAL 80MW POTOMAC RIVER UNIT #1 BOILER UPGRADE
Industry Code: 01 Power
Project ID: 27002019
TIV: $3,000,000
Project SIC Prod: 4931 Electricity/Steam [IPP]
Plant SIC: 4931 Electricity/Steam [IPP]
Environmental: Air (A) Land (L) Water (W)
Research Date: 2008-01-16

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DEVELOPER: Mirant Potomac River LLC
Address: 1400 North Royal Street
City/State: Alexandria, VA 22314-1199
Phone: (703) 838-8249 x8219
Contact: Rick Fearing
Title: Maintenance Planner
E-Mail: rick.fearing@mirant.com

Plant: Potomac River Power Station
Plant ID: 1014483 Union Status: Union
Unit Name: Potomac River 01
Zone: VA*03 County: Alexandria City
Location: 1400 North Royal Street
City/State: Alexandria, VA 22314-1199
Phone: (703) 838-8249

SITE.REP: Mirant Potomac River LLC
Address: 1400 North Royal Street
City/State: Alexandria, VA 22314-1199
Phone: (703) 838-8249
Contact: Raymond Schlicht
Title: Maintenance Engineer
E-Mail: ray.schlicht@mirant.com

PEC Timing: P1
PEC Activity: Detailed Design

Scope: OWNER conducts Detailed Design for Unit #1 Boiler Upgrade. DETAILS: Upgrade Coal Alstom/CE T-Fired DB Boiler (800,000 lbs/hr, 875psi @ 950F) that powers 80MW GE Turb/Gen, by replacing Superheater, Waterwalls, Tubes and REQUIRES MRO TO: Boiler (Boiler, Pendants, Refractory, Economizer, Condenser, Fans, Refractory), Turb/Gen (Rotors, Discs, Buckets, Stators, Nozzles, Pumps, Shafts). ENVIRONMENTAL: (A) CEMS Mods, Stacks; (L) Spill Contain, Used Equipment/Ash Disp, Spill Contain; (W) Demineralizer Sys.

Schedule: OWNER expects to complete Detailed Design through 2Q08 (Apr) and releases RFQ's with Bid Documents for Equipment plus Specialty Subcontractors as required 2Q08 (Jun) to 3Q08 (Aug). Unit #1 Boiler Upgrade is scheduled for Kick-Off 4Q08 (Oct). Project Completion 4Q08 (Dec).

Energy:	Boiler	Turbine	Generator
Buy:		Fuel	
Sell:	Electricity		

Plant Standard Contacts

Title	Contact	QC Date	Telephone	On-Site	E-Mail
Plant Manager	Mike Stumps	01/11/2008	(703) 838-3773	Yes	
Maintenance Manager	Doug Ryan	01/11/2008	(703) 838-3711	Yes	doug.ryan@mirant.com
Purchasing Manager	Gordon Spangler	11/19/2007	(703) 838-8210	No	
Engineering Manager	Mark Nitz	11/19/2007	(703) 838-8200	Yes	mark.nitz@mirant.com
Environmental Manager	Debra Knight	11/19/2007	(703) 838-3701	Yes	
Safety Manager	Lazon Allen	11/19/2007	(703) 838-8201	Yes	
Utility Manager	Doug Ryan	11/19/2007	(703) 838-3711	Yes	doug.ryan@mirant.com
IT Manager	Julie McLeod	11/19/2007	(301) 955-9001	No	julie.mcleod@mirant.com
HR Manager	Laurie Robie	11/19/2007	(301) 843-4525	No	

Historical Reports

Project Name	Report Date	TIV	Phase
ALEXANDRIA COAL 80MW POTOMAC RIVER UNIT #1 BOILER UPGRADE	2008-01-16	$3,000,000	Detailed Design (P1-09)

Project: ALEXANDRIA COAL 80MW POTOMAC RIVER UNIT #2 BOILER UPGRADE
Industry Code: 01 Power
Project ID: 27002020
TIV: $3,000,000
Project SIC Prod: 4931 Electricity/Steam [IPP]
Plant SIC: 4931 Electricity/Steam [IPP]
Environmental: Air (A) Land (L) Water (W)
Research Date: 2008-01-16

OWNER: Mirant Potomac River LLC
Address: 1400 North Royal Street
City/State: Alexandria, VA 22314-1199
Phone: (703) 838-8249
Contact: Doug Ryan
Title: Outage Manager
E-Mail: doug.ryan@mirant.com

DEVELOPER: Mirant Potomac River LLC
Address: 1400 North Royal Street
City/State: Alexandria, VA 22314-1199
Phone: (703) 838-8249 x8219
Contact: Rick Fearing
Title: Maintenance Planner
E-Mail: rick.fearing@mirant.com

Plant: Potomac River Power Station
Plant ID: 1014483 Union Status: Union
Unit Name: Potomac River 02
Zone: VA*03 County: Alexandria City
Location: 1400 North Royal Street
City/State: Alexandria, VA 22314-1199
Phone: (703) 838-8249

SITE.REP: Mirant Potomac River LLC
Address: 1400 North Royal Street
City/State: Alexandria, VA 22314-1199
Phone: (703) 838-8249
Contact: Raymond Schlicht
Title: Maintenance Engineer
E-Mail: ray.schlicht@mirant.com

PEC Timing: P1
PEC Activity: Detailed Design

Scope: OWNER conducts Detailed Design for Unit #2 Boiler Upgrade. DETAILS: Upgrade a Coal Alstom/CE T-Fired DB Boiler (800,000 lbs/hr, 875psi @ 900F) that powers 80MW GE Turb/Gen by replacing Superheater, Waterwalls, Tubes and REQUIRES MRO TO: Boiler (BFW Sys, Refractory, Fans, Pendants, Ducts, Economizer, Condenser), Turb/Gen (Rotors, Bearings, Discs, Nozzles, Pumps, Stators, Motors). ENVIRONMENTAL: (A) CEMS Mods, Stacks; (L) Spill Contain, Used Equipment/Ash Disp; (W) Wastewater/Demineralizer Sys.

Schedule: OWNER expects to complete Detailed Design through 2Q08 (Apr) and also releases RFQ's with Bid Documents for Equipment plus Specialty Subs as required 2Q08 (Jun) to 3Q08 (Sep). Unit #2 Boiler Upgrade is scheduled for Kick-Off 4Q08 (Nov). Project Completion Expected 1Q09 (Jan).

Energy: Boiler Turbine Generator
Buy: Fuel
Sell: Electricity

Plant Standard Contacts

Title	Contact	QC Date	Telephone	On-Site	E-Mail
Plant Manager	Mike Stumps	01/11/2008	(703) 838-3773	Yes	
Maintenance Manager	Doug Ryan	01/11/2008	(703) 838-3711	Yes	doug.ryan@mirant.com
Purchasing Manager	Gordon Spangler	11/19/2007	(703) 838-8210	No	
Engineering Manager	Mark Nitz	11/19/2007	(703) 838-8200	Yes	mark.nitz@mirant.com
Environmental Manager	Debra Knight	11/19/2007	(703) 838-3701	Yes	
Safety Manager	Lazon Allen	11/19/2007	(703) 838-8201	Yes	
Utility Manager	Doug Ryan	11/19/2007	(703) 838-3711	Yes	doug.ryan@mirant.com
IT Manager	Julie McLeod	11/19/2007	(301) 955-9001	No	julie.mcleod@mirant.com
HR Manager	Laurie Robie	11/19/2007	(301) 843-4525	No	

Historical Reports

Project Name	Report Date	TIV	Phase
ALEXANDRIA COAL 80MW POTOMAC RIVER UNIT #2 BOILER UPGRADE	2008-01-16	$3,000,000	Detailed Design (P1-09)